

EG4[®] 3000EHV-48 INVERTER/CHARGER

The EG4 3000EHV-48 is a multi-function inverter/charger, combining the capabilities of an inverter, MPPT solar charger, and battery charger to offer uninterrupted power support in a portable size. Its comprehensive LCD display offers user-configurable and easily accessible button operation including battery charging current, AC/Solar Charger priority, and acceptable input voltage based on different applications.

**PURE SINE
WAVE**

**3000W
CONTINUOUS
OUTPUT**

**PARALLEL UP TO
12 UNITS**

3000W CONTINUOUS OUTPUT

Power your electronics without worry. The pure sine wave inversion and power factor correction provides clean, reliable inverter power with low total harmonic distortion.

500 VDC MAX INPUT

Extra high voltage means smaller wire size. Skip the combiner box too!

PARALLEL UP TO 12 UNITS

12 Single Phase | 2 x 6 Split Phase | 3 x 4 Three Phase

LIGHTWEIGHT

Only 18lbs! Lift less and power more!

SMALLER FOOTPRINT THAN OTHER COMPARABLE MODELS

17 inches tall, 11.75 inches wide, and 4 inches deep.

OVERLOAD PROTECTION

5 seconds @ 150% load & 10 seconds @ 110% - 150% load

OVERTEMPERATURE PROTECTION

Shield your unit from inclement weather with an extra layer of overtemperature protection.

SHORT CIRCUIT PROTECTION

Safely power higher amperage loads with peace of mind - the short circuit feature will protect your unit from overcharging

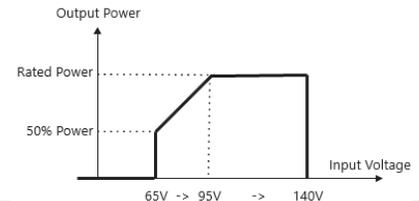


TECHNICAL SPECIFICATIONS

LINE MODE SPECIFICATIONS

INPUT VOLTAGE WAVEFORM	Sinusoidal (utility or generator)
NOMINAL INPUT VOLTAGE	120VAC
LOW LOSS VOLTAGE	95VAC± 7V (UPS); 65VAC± 7V (Appliances)
LOW LOSS RETURN VOLTAGE	100VAC± 7V (UPS); 70VAC± 7V (Appliances)
HIGH LOSS VOLTAGE	140VAC ±7V
HIGH LOSS RETURN VOLTAGE	135VAC ±7V
MAX AC INPUT VOLTAGE	150VAC
MIN AC INPUT VOLTAGE	Electronics: 95 - 140VAC Home Appliances: 65 - 140VAC
NOMINAL INPUT FREQUENCY	50Hz / 60Hz (Auto detection)
LOW LOSS FREQUENCY	40 ±1Hz
LOW LOSS RETURN FREQUENCY	42 ±1Hz
HIGH LOSS FREQUENCY	65 ±1Hz
HIGH LOSS RETURN FREQUENCY	63 ±1Hz
OUTPUT SHORT CIRCUIT PROTECTION	Line mode: Circuit Breaker 30A Battery mode: Solid State FETs 400A
EFFICIENCY (LINE MODE)	[8 95% (Rated R load, battery full charged)
TRANSFER TIME	10ms typical (UPS); 20ms typical (Appliances)

OUTPUT POWER DERATING:
WHEN AC INPUT VOLTAGE DROPS TO 95V, THE OUTPUT
POWER WILL BE DERATED.



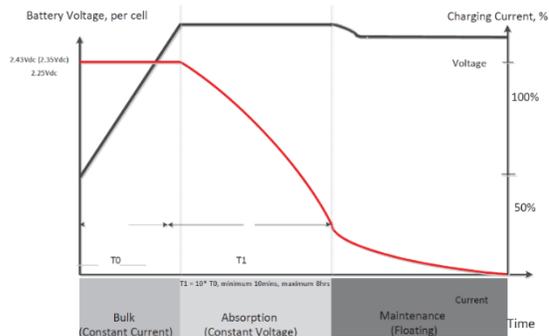
INVERTER MODE SPECIFICATIONS

RATED OUTPUT POWER	3kVA/3kW
OUTPUT VOLTAGE WAVEFORM	Pure Sine Wave
OUTPUT VOLTAGE REGULATION	110/120VAC ±5%
OUTPUT FREQUENCY	60Hz or 50Hz
BATTERY TO INVERTER EFFICIENCY	94%
PV TO INVERTER EFFICIENCY	97%
OVERLOAD PROTECTION	5s@ ≈150% load; 10s@110% ≈150% load
SURGE CAPACITY	2 X rated power for 5 seconds
NOMINAL DC INPUT VOLTAGE	48 VDC
MPPT STARTUP VOLTAGE	120 VDC
LOW DC WARNING VOLTAGE, @LOAD< 20%	44.0 VDC
LOW DC WARNING VOLTAGE, @ 20% ≤ LOAD < 50%	42.8 VDC
LOW DC WARNING VOLTAGE, @LOAD ≥ 50%	40.4 VDC
LOW DC WARNING RETURN VOLTAGE, @LOAD< 20%	46.0 VDC
LOW DC WARNING RETURN VOLTAGE, @ 20% ≤ LOAD < 50%	44.8 VDC
LOW DC WARNING RETURN VOLTAGE, @LOAD ≥ 50%	42.4 VDC
LOW DC CUT-OFF VOLTAGE, @LOAD< 20%	42.0 VDC
LOW DC CUT-OFF VOLTAGE, @ 20% ≤ LOAD < 50%	40.8 VDC
LOW DC CUT-OFF VOLTAGE, @LOAD ≥ 50%	38.4 VDC

UTILITY CHARGING MODE

CHARGING CURRENT (AC)	60Amp (@ VI/P=120Vac)
CHARGING CURRENT (PV+AC)	80Amp (@ VI/P=120Vac)
BULK CHARGING VOLTAGE - FLOODED BATTERY	58.4 Vdc
BULK CHARGING VOLTAGE - AGM / GEL BATTERY	56.4 Vdc
FLOATING CHARGING VOLTAGE	54Vdc
OVERCHARGE PROTECTION	63Vdc
CHARGING ALGORITHM	3-Step

CHARGING CURVE



SOLAR INPUT

RATED POWER	5000W
MAX. PV ARRAY OPEN CIRCUIT VOLTAGE	500VDC
PV ARRAY MPPT VOLTAGE RANGE	120VDC~450VDC
MAX. CURRENT DRAW	18A
NUMBER OF MPPT	1
START UP VOLTAGE	42 VDC
MAX CHARGING CURRENT (PV)	80A

GENERAL SPECIFICATIONS

SAFETY CERTIFICATION	CE
OPERATING TEMPERATURE RANGE	-10°C to 55°C (14°C to 131°F)
STORAGE TEMPERATURE	-15°C~ 60°C (5°C to 140°F)
HUMIDITY	5% to 95% Relative Humidity (Non-condensing)
DIMENSION (D*W*H)	16.5 x 13.4 x 5.6 in. (420 mm x 340 mm x 142 mm)
NET WEIGHT, KG/LBS.	8.2kg / 18lb
USB	No USB Port
RS-232	Yes
RS-485	Yes USB Type A
DRY CONTACT	Yes
OPERATING ALTITUDE	0~1500m
IDLE POWER CONSUMPTION	<70W, <15W (Standby)
ENCLOSURE RATING	IP 21 (Indoor Use)
WARRANTY	3 Years

PARALLEL SPECIFICATIONS

MAXIMUM UNITS IN PARALLEL	12
CIRCULATION CURRENT (NO LOAD)	<2A
POWER IMBALANCE RATIO	<5%
PARALLEL COMMUNICATION	CAN
TRANSFER TIME(PARALLEL)	<20ms
PARALLEL KIT	Built In (RJ45 Port)